Work Orde October 7, 2010							A TOTAL CONTRACTOR AND A STATE OF THE STATE						Page 1
Item ID: Revision ID:	D212-664-20)7			Accept					Setup	Start		
	Crosstube Lov 10/07/10 10/15/10	v Standard Aft Start Qty: 1.00 Req'd Qty: 1.00				Cust Item Customer:					Stop		
Approvals:	Process Pla	nn:	Date:		Tooling: SPC (Y/N):		Pate:]	Run	Start Stop		
Sequence ID/ Work Center II	D	Operation Description		-	Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp
Draw Nbr D212-664-247		rision Nbr											
DC Document Control	,	DOCUMENT CONTR		create labels as	0.00 0.00 per PPP D212-664-207	CHG001							
I 10 	•	Pick Kit Packaging Memo			0.00		D	2/2	7		£.	2	
120	(~	BENDING MACHINI	E - CROSSTU	BES	0.00				(>		

CNC Bend 2

CŅC Alpha 160 Bender

0.00 Memo Bend tube as per Dwg D212-664-247 using CNC bender program and Folio

W/O:		WORK ORDER CHANGES									
DATE	STEP	PROCEI	DURE CHANGE By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
		•					.'				
		*									
		**									

NCR: 68	2747	W	ORK OR	DER NON-CONFORMANCE	(NCR)			
		Description of NC		Corrective Action Section B		Verification	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
10-10-7	130.	y-tube broke on first pass of side bends. same fracture as all other broken x-tubes. (B50879) scrap Ereplac	1	- Ture was horned in the inner wall over to past re-work. No apparent words on the wall surface or in the wall thickness. Scrap to be I clestral.	EZ ,	10-10-12 05/012	,	10:1012
		-second tube went well on middle, I sin then broke on last side.	p.b. V	Replace. Serup 2 destray	EL 10-10-17		Harry States	16:40:12

Page 2

October 7, 2010 2:14:26 PM

Item	ID:
item	ID:

D212-664-207

Accept



Setup Start

Stop



Revision ID:

Item Name:

Required Date: 10/15/10

Crosstube Low Standard Aft

Start Date:

10/07/10

Start Qty: 1.00

Req'd Qty: 1.00



Cust Item ID: Customer:

Tool ID

Reference:

Δ	nr	r	w	a l	٠.
	มเ	JΙU	JV.	aı.	э.

Process Plan:

OC:

Date:

Tooling:

SPC (Y/N):

Set Up/

Date:

Date:

Tool # Plan

Code

Accept

Qty

Stop

Reject

Qty

Start

Run



Insp.

Stamp

Reject

Number

Sequence ID/ **Work Center ID**

130

Quality Control

Operation Description

QC15- Crosstube Dimensional Check

Memo

Run Hours 0.00

Date: _____

0.00

140

Crosstubes

Crosstubes

Crosstubes

Memo

0.00

0.00

1-Drill Rivet holes as per Dwg D212-664-247 using DT8972.***Use T-Pin***

2-Drill pilot holes in tube as per Dwg D212-664-247 using DT8550 and DT8551

3-Ream hole to finish size in tube as per Dwg D212-664-247

4-Deburr & Inspect for surface damage. Repair damage within limits as per

Dwg D212-664-247

5-Scribe part # and batch # using vibrating stylus as per Dwg D212-664-

247

W/O:			WC	RK ORDER CHANG	ES		· ···						
DATE	STEP	PRO	OCEDURE CHAI	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
Part No	•	PAR #:	Fault Cate	jory:	_ NCR: Yes	No DQ	A:	Date: _					
	Re	esolution:	Disposition	n:	_ QA: N/C C	losed:		Date: _					
NCR:		,	WORK ORDER NON-CONFORMANCE (NCR)										
DATE	STEP	Description of NC		Corrective Action Section		Verifi	cation	Approval	Approval				
DATE	SIEF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign of Date		tion C	Chief Eng	QC Inspector				
									ļ				

October 7, 2010 2:14:26 PM

Required Date: 10/15/10



Page 3

Item ID:

D212-664-207

Accept



Setup Start



Revision ID:

Item Name:

Crosstube Low Standard Aft

Start Date:

10/07/10

Start Qty: 1.00

Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Tooling: Date:

Date:_____

SPC (Y/N):

Date: Date: Run

Start

Stop

Reject

Qty

Stop



Sequence ID/

Work Center ID

150

HandFXtube

Hand Finishing Crosstubes

Operation Description

Crosstubes Chemical Conversion

Set Up/ **Run Hours**

0.00

0.00

Tool ID

Tool # Plan Code

Accept Qty

Reject Number

Insp. Stamp

Memo Chemical Conversion Coat Tube & Cuffs

160

Quality Control

QC3- Inspect Part Finish

0.00

Memo

0.00

170

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

W/O:			WO	RK ORDER CHANGES					
DATE	STEP	PRO	OCEDURE CHAN	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
					· .			1 Tod Wigi	
					:				
Part No	:	PAR #:	Fault Categ	ory: N	CR: Yes	No DC)A:	Date: _	
	R	esolution:	Disposition	ı: G	A: N/C C	losed:		Date: _	
NCR:		,	WORK ORDE	R NON-CONFORMANC	CE (NC	R)			
DATE	STEP	Description of NC		Corrective Action Section B		Verif	ication	Approval	Approval
DAIL		•	Initial	Action Description	Gian	9. !			
	OTE:	Section A	Chief Eng	Chief Eng	Sign Date		tion C	Chief Eng	QC Inspector
	OIL!	Section A					tion C		QC Inspector
	O I L I	Section A					tion C		QC Inspector
_	3121	Section A					tion C		QC Inspector
	312 1	Section A					tion C		QC Inspector
	O L	Section A					tion C		QC Inspector
		Section A					tion C		QC Inspector
		Section A					tion C		QC Inspector
		Section A					tion C		QC Inspector
		Section A					tion C		QC Inspector

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Page 4

Item ID:

D212-664-207

Accept



Setup Start



Revision ID:

Item Name:

Crosstube Low Standard Aft

Start Date:

10/07/10

Start Oty: 1.00

Required Date: 10/15/10

Req'd Qty: 1.00



Cust Item ID: Customer:

Tool ID

Reference:

Approvals:

Process Plan:

Operation

Description

Date:_____

Date: Tooling:

SPC (Y/N):

Set Up/

Run Hours

Date:

Date:

Tool # Plan

Code

Run

Accept

Qty

Start

Reject

Qty



Stop

Reject

Stop

Number Stamp

Insp.

Sequence ID/ **Work Center ID**

180

Outsource2

Memo

Outsource process - NDT per OSI038 4.1

0.00

0.00

Outsource process - NDT

Liquid Penetrant Inspection as per QSI 038 LPI as per ASTM 1417 Level 2 Attach copy of NDT results to work order

190

Packaging

Packaging Memo

Memo

0.00

0.00

Packaging

Ensure copy of NDT results attached to work order.

200

Quality Control

QC5- Inspect part completeness to step on W/O

Receive & Inspect for Damage & Mat'l Certs

0.00

0.00

Inspect for damage & ensure results are as per Dwg D212-664-207

W/O:		WORK ORDER CHANGES											
DATE	STEP	PRO	DCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
								T Tod Wgi					
:						Ċ							
Part No	:	PAR #:	Fault Cate	gory:	_ NCR: Ye	s No D	QA:	Date: _					
	R	esolution:	Disposition	on:	QA: N/C	Closed: _		Date: _					
NCR:		1	WORK ORDER NON-CONFORMANCE (NCR)										
DATE	STEP	Description of NC			tion B	Ver	ification	Approval	Approval				
DAIL	SILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sigr Da		ection C	Chief Eng	QC Inspector				
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					:								

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Page 5

Item ID:

D212-664-207

Accept

Setup Start

Stop



Revision ID:

Item Name:

Crosstube Low Standard Aft

Start Date:

10/07/10

Start Qty: 1.00

Required Date: 10/15/10

Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____ **Tooling:**

QC: _____ Date: ____ SPC (Y/N):

Date:

Date:

Run Start



Sequence ID/

Work Center ID

Operation **Description**

Crosstubes

Set Up/ **Run Hours** Tool ID

Tool # Plan

Code

Accept Qty

Reject Qty

Stop

Reject Number Stamp

Insp.

210

Crosstubes Crosstubes

Memo

0.00

0.00

1-Rivet and assemble Cuffs with T-Pin in the through bolt holes as per Dwg

D212-664-247, with Sika flex in Between tube & Cuff

A/R SIKAFLEX -241/-291 BATCH:__

215

QC

Quality Control

OC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Inspect cuff with T-Pin

W/O:			W	ORK ORDER CHANGE	ES			•	
DATE	STEP	PRO	CEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Cat	tegory:	NCR: Yes	No DQ	A :	_ Date: _	
	R	esolution:	Dispositi	ion:	QA: N/C C	losed:		Date: _	
NCR:	-	V	VORK ORI	DER NON-CONFORMA	NCE (NC	7)			
DATE	STEP	Description of NC		Corrective Action Section		Verifi	cation	Approval	Approval
DAIL	SIEF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign o		ion C	Chief Eng	QC Inspector
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October 7, 2010 2:14:33 PM

Required Date: 10/15/10



Page 6

Item ID:

D212-664-207

Accept



Setup Start

Stop



Revision ID:

Item Name:

Crosstube Low Standard Aft

Start Date:

10/07/10

Start Oty: 1.00

Req'd Qty: 1.00



Cust Item ID:

Customer:

Tool ID

Reference:

Approva	ls:
Aipprova	1.5.

Process Plan:

Date:

Tooling: SPC (Y/N):

Set Up/

Run Hours

Date:

Date:

Tool # Plan

Code

Run

Reject

Qty

Accept

Qty

Start



Stop

Reject



Number Stamp

Insp.

Sequence ID/ **Work Center ID**

220



SprayPaint Spray Painting Operation Description

Spray Painting per QSI005 4.2

QC: _____ Date:____

SprayPaint

Memo

0.00

0.00

1-Prime inside and outside crosstube as per QSI 005 4.2

2-Paint outside crosstube with White Imron as per QSI 005 4.2

PRIME: Start Time:

Fininsh Time:

PAINT: Start Time:

Finish Time:

230

Quality Control

QC14- Inspect Spray Paint

0.00

0.00

Wrap in plastic bag to protect from scratches

W/O:	İ		W	ORK ORDER CHANG	ES			
DATE	STEP	PRO	OCEDURE CH	ANGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Cate	egory:	_ NCR: Yes	No DQA:	Date: _	
	Res	olution:	Disposition	on:	_ QA: N/C Cld	osed:	Date: _	
NCR:		,	WORK ORE	ER NON-CONFORMA	ANCE (NCR)	-	
DATE	STEP	Description of NC		Corrective Action Section		Verification	Approval	Approval
	SIEF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
· ·								
						·		

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Item ID:

D212-664-207

Accept



Setup Start



Revision ID:

Item Name:

Crosstube Low Standard Aft

Start Date:

10/07/10

Start Qty: 1.00

Required Date: 10/15/10

Req'd Qty: 1.00



Date: _____ SPC (Y/N):

Cust Item ID:

Customer:

Reference:

Ap	prov	/als	:

Process Plan:

Date:_____

Tooling:

Date: _____ Date:

Run

Start Stop

Stop



Sequence ID/ **Work Center ID**

Operation Description Set Up/ **Run Hours** Tool ID

Tool # Plan

Code

Accept Qty

Reject Qty

Reject Number Stamp

Insp.

240

Crosstubes

Crosstubes

0.00

0.00

Crosstubes

1- Assemble as per Dwg D212-664-247

2- Lightly scuff the bonded area using a 320 grit sand paper and clean the area

with 41058 wash 'n' wipe

3- Instal support with magnobond 6398 per dwg D212-664-247,

cure for 12hrs before packaging.

Time & date of application:

Batch:

Memo

EXP. DATE

250

QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

Quality Control

Dart Ae	rospace L	เน									
W/O:			RK ORDER CHANG	RDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
Part No	:	PAR #:	Fault Categ	ory:	_ NCR: Yes	No DC	A:	_ Date: _			
	Resolution:		Disposition	:	QA: N/C C	losed: _		Date: _			
NCR:			WORK ORDE	R NON-CONFORM	ANCE (NC	R)					
		Description of NC		Corrective Action Sect	ion B	Vorif	ication	Approval	al Approval		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Date	& Sec	tion C	Chief Eng			
								;			
											
	1 1		1		į.	1		1	1		

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Required Date: 10/15/10



Page 8

Item ID:

D212-664-207

Accept

Setup Start

Stop



Revision ID:

Item Name:

Crosstube Low Standard Aft

Start Date:

10/07/10

Start Qty: 1.00

Req'd Qty: 1.00



Date:_____

Cust Item ID:

Customer:

Tool ID

Reference:

Approvals:

QC:

Process Plan:

Date: **Tooling:**

SPC (Y/N):

Set Up/

Run Hours

Date:

Date:

Tool # Plan

Code

Run

Accept

Qty

Start



Stop

Reject

Number

Reject

Qty

Insp.

Stamp

Sequence ID/ Work Center ID

255

Packaging

Packaging

Operation Description

Pick Kit

0.00

0.00

Memo

260

Quality Control

QC4- 100% Inspect kits for completeness

0.00

Memo

0.00

270

Packaging

Packaging

Packaging

Memo

0.00

0.00

Identify and pack for shipping as per PPP D212-664-207

W/O:			W	ORK ORDER CHANGI	ES			
DATE	STEP	PRO	CEDURE CH	ANGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
							Prod Migr	,
								
Part No	Part No: PAF							
	Resolution:						Date: _	
NCR:			VORK ORE	DER NON-CONFORMA	NCE (NCR)			
DATE	STEP	Description of NC	Initial	Corrective Action Section	on B Sign &	Verification	Approval	
		Section A	Chief Eng	Action Description Chief Eng	Date	Section C	Chief Eng	QC Inspector
7.4.								
		-						
	i		}		ļ.		1	

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Item ID:

D212-664-207

Accept

Setup Start

Stop



Revision ID:

Item Name:

Required Date: 10/15/10

Crosstube Low Standard Aft

Start Date:

10/07/10

Start Qty: 1.00

Req'd Qty: 1.00



Cust Item ID:

Customer:

Tool ID

Reference:

Approvals:

Process Plan:

Operation

Description

QC21- Final Inspection - Work Order Release

Date:

Date:_____

Tooling:

SPC (Y/N):

Set Up/

Run Hours

Date: Date:

Tool # Plan

Code

Run

Accept

Qty

Start



Stop

Reject

Reject

Qty

Number Stamp

Insp.

Sequence ID/

Work Center ID

280

Quality Control

Memo

0.00

0.00

MF 10-10-12

October 7, 2010 2:14:22 PM

Work Order ID: 62747

Parent Item:

D212-664-207

Parent Item Name: Crosstube Low Standard Aft



Start Date: 10/07/10

Required Date: 10/15/10

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev:A New Issue 07.09.12 EC verified by: JLM IPP Rev:B ECN 1100p 08-01-11 DD verified by: EC IPP Rev:C ECN 1121 08-02-25 DD verified by:eC

Purchased

No

IPP Rev: D QC5 replaced by QC15 at step 5 KJ Verified by: ec

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D212-664- 207TRNRevA	•	Manufactured	No			110	Each	0.0000	1	1			***************************************
Crosstube Turning Detail				B5@	3879.	60461				EL	1070	0-10	<u> </u>
D3660-1		Manufactured	No			140	Each	6.0000	2	2			
				Location		Loc C	<u>)ty</u>	Loc Code					

ST477 53501 220 1,177.000 Each

CHERRY RIVET

CR3212-4-06

Location	Loc Qty	Loc Code	
ST311	1177		
112492	156		
112612	21		
112724.	200		(
112794	800	•	

Dair Aci	Ospace	Liu									
W/O:			WORK ORDER CHANGES								
DATE	STEP	PRO	CEDURE CH	ANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
·											
Part No:											
	R	esolution:	Dispositi	on:	QA: N	VC Clos	sed:		Date: _		
NCR:			WORK OR	DER NON-CONFOR	RMANCE ((NCR)					
DATE	STEP	Description of NC	Initial			Sign &			Approval	Approval QC Inspector	
		Section A					Secu	OII C	Office Eng	QO Mapeciol	
							i				

October 7, 2010 2:14:22 PM

Work Order ID: 62747

Parent Item:

D212-664-207

Parent Item Name: Crosstube Low Standard Aft



Start Date: 10/07/10

Required Date: 10/15/10

Start Qty: 1.00

Required Qty: 1.00

D3595-063-530

Manufactured

No

240

Each

73.0000

DAMPER CLICATION	

RUBBER CUSHION

Location		Lo	c Oty	Loc Code
FP			36	
	50030		12	
	51776		24	
LG			37	
	59581		37	
		240	Each	37.0000

Manufactured No

2

Support

MS21920-28

D2940-1

Location	Loc	Loc Code			
LG		37			
45203		1			
57338		16			
60271		20			
	240	Each	65.0000		

Purchased

No

Clamp(per MIL-DTL-8783C)

LC

Location

105884 112863 114749

Loc Oty Loc Code 5 60 12 48

Dart Ae	rospace	Ltd							•
W/O:		······································	WC	ORK ORDER CHANGE	S				
DATE	STEP	PRO	CEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	•	PAR #:	Fault Cate	gory:	NCR: Yes	No DQ	A:	Date:	1
	Re	esolution:	Disposition	n:	QA: N/C C	osed:		Date:	
NCR:		V	VORK ORDI	ER NON-CONFORMAI	NCE (NCF	3)			
		Description of NC		Corrective Action Section	n B	Vorifi	cation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	k Sect	ion C	Chief Eng	Approval QC Inspector
								i ii	
							-		

October 7, 2010 2:14:23 PM

Work Order ID: 62747

Parent Item:

D212-664-207

Parent Item Name: Crosstube Low Standard Aft



Start Date: 10/07/10

Start Qty: 1.00

Required Date: 10/15/10

Required Qty: 1.00

D3428-1

Placard

ST096

No

No

No

Manufactured

Purchased

Location Loc Qty 62096

255

255 Each

Each

Loc Code

8.0000

240.0000

Nut

MS21042L6

Location	Loc	<u>Qty</u>	Loc Code
ST300		240	
111578		4	
114495		36	
115300		200	
	255	Each	0.0000

AN960JD616 NAS1149D0663J Purchased

Washer AN6-40A

Purchased No 255

Each 87.0000

18

18

Bolt

Location Loc Qty Loc Code ST343 87 112828 114283 26 115300 60

Dart Aeı	rospace	Ltd							•	
W/O:			WO	RK ORDER CHANGE	S					
DATE STEP		PRO	CEDURE CHAI	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
Part No	:	PAR #:	Fault Cate	gory:	NCR: Yes	No DQ	4 :	Date:		
	R	esolution:	Disposition	າ:	QA: N/C Cld	sed:		Date:		
NCR:		\	WORK ORDE	ER NON-CONFORMAI	NCE (NCR)			-	
		Description of NC		Corrective Action Section	n B	Verific	ation	Approval	Approval	
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Secti		Chief Eng	QC Inspector	

Picklist Print

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Page 4

Work Order ID: 62747

Parent Item:

D212-664-207

Parent Item Name: Crosstube Low Standard Aft



115316

Start Date: 10/07/10

Required Date: 10/15/10

Start Qty: 1.00

Required Qty: 1.00

AN6-41A



Purchased

No

255

Each

30

62.0000

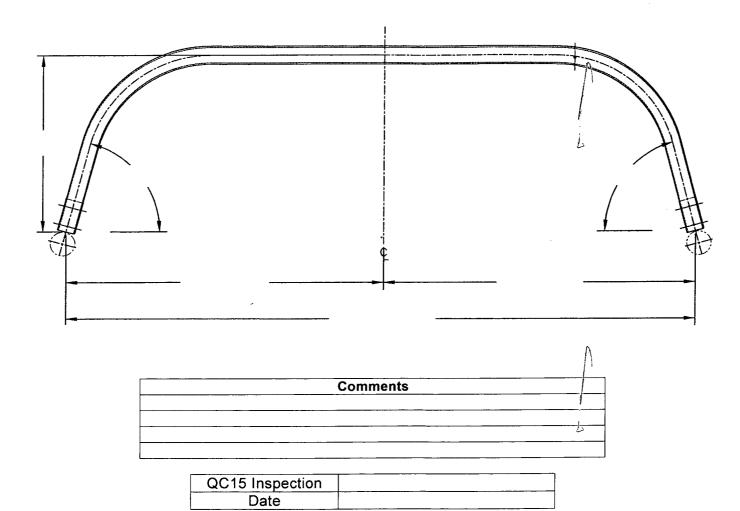
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olt			
	Location	Loc Qty	Loc Code
	ST344	62	_
	113288	32	

Dart Aeı	rospace	Ltd							,
W/O:			WO	RK ORDER CHANGE	ES				<u> </u>
DATE	STEP	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Cate	gory:	NCR: Yes	No DQ	A:	Date:	
Resolution:			Disposition: QA		QA: N/C CI	osed:		Date: _	
NCR:	,	1	WORK ORDE	R NON-CONFORMA	NCE (NCF	?)			
		Description of NC	Corrective Action Section			Verification	Approval	Approval	
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Sect.	ion C	Chief Eng	QC Inspector
						ŀ			
			1		1			l .	1

DART AEROSPACE LTD	Work Order:	62447
Description: Crosstube Low Aft (205/212)	Part Number	D212-664-207
Inspection Dwg: D212-664-247 Rev: B	<u> </u>	Page 1 of 1

Required Dimension	Min	Max	
Height	18.16	18.42	
1/2 Span	48.55	48.81	
Angle	49	52	
Total Span	97.1	97.62	



Rev	Date	Change	Revised by	Approved
Α	08.02.29	New Issue	KJ/JM	
В	10.04.01	Dwg Rev updated	KJ	





Item	Qty -247	Qty -247B	Part Number	Description	
1	X		D212-664-247	CROSSTUBE ASSEMBLY (205/212 LOW AFT)	
2		Х	D212-664-247B	CROSSTUBE ASSEMBLY (214 LOW AFT)	
3	1	1	D6008-132	CROSSTUBE	
4	2	2	D2940-1	SUPPORT	
5	4	4	D3595-063-530	RUBBER CUSHION	
6	2	2	D3660-1	CUFF	
7	4	4	MS21920-28	CLAMP (OR MS21920-30)	
8	44	44	CR3212-4-06	RIVET (OR M7885/3-4-06)	
9	A/R	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)	
10	A/R	A/R	SIKAFLEX-241/-291	SEALANT (OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT)	

GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6008-132
- 2) FINISHED LENGTH = 128 268±0 020 (BEFORE BENDING/TRIMMING)
 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2 PAINT OUTSIDE PER DART QSI 005 4.2
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

- TOLERANCES ARE FER DARY USE OF DIMERSON THERWISE NOTED.

 UNITS: INCHES UNLESS OTHERWISE NOTED.

 BREAK SHARP EDGES: 0.005 TO 0.010 MAX.

 IDENTIFICATION: SCRIBE DART PART NUMBER "D212-664-XXX" AND BATCH NUMBER ON INSIDE OF CUFF USING VIBRATING STYLUS.
- WEIGHT: D212-664-247 = 36.6 bs (PER IIN-D212-664)
 D212-664-247B = 36.6 bs (PER IIN-D212-664)
 PART IS SYMMETRIC ABOUT CENTERLINE.
- WHEN MACHINING TAPER, RUN CUTTER OFF PART. BLEND OUT EDGE LONGITUDINALY, TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D., EXCEPTUP TO 10% IS ALLOWED IN AREA NOTED.
- 11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QS1038.
 12) INSTALL D2940-1 SUPPORT USING 0.03* TO 0.06* THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF D2940-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE PER QSI 015. LET CURE FOR 12 HOURS AFTER
- DESAUGH THAT WILL BE INCONTROL WITH THE CHOSTOBLE FLY COLORS.

 INSTALL LATION AND PRIOR TO PACKAGING.

 13) INSTALL MS2 1920-28 CLAMPS (OR 30) WITH D3595-063-530 RUBBER CUSHIONS TO SECURE THE D2940-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE OF CROSSTUBE SUPPORT.

 14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.
- 16) INSTALL D3660-1 CUFF AFTER CHEMICAL CONVERSION COAT BUT BEFORE PAINT, WITH A LAYER OF SIKAFLEX:241/-291 OR PROSEAL 890 OR MIL-S-8802 CLASS 82 SEALANT BETWEEN CUFF AND CROSSTUBE. SEAL EDGE OF CUFF TO ENSURE NO GAPS
- 17) TOUCH-UP HOLES WITH CHEMICAL CONVERSION COAT.



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В	REVISE GENERAL NOTES/PART LIST; UPDATE TO CURRENT STANDARDS; ADD -247B (ZN C4-2, D5-2)				09.09.30
Α	NEW ISSUE				07.07.07
REV.	DESCRIPTION			BY	DATE
DESIGN P DRAWN RF		q)	DART AEROSPACE LTD		
		RF	HAWKESBURY, ONTARIO, CANADA		
CHECK	ED	P	DRAWING NO.		REV. B
MFG. APPR.		72	D212-664-247	S	SHEET 1 OF 4
APPROVED 10		NO	TITLE		SCALE
DE APPR.		4	CROSSTUDE (205/212 LOW AFT) NTS		
DATE 09.09.30			COPYRIGHT © 2007 BY DAP? AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONFIDENTIAL THE MOT TO USE USED FOR ANY PURPOSE OF CONFIDENCIATION TO ANY OTHER PERSON WITHOUT		

